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APPLICATION NO. ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR DAVID C. LONG 10/604,257 07/07/2003 FIS920030100US1 1256 **EXAMINER** 29154 7590 06/01/2005 FREDERICK W. GIBB, III **EDWARDS, LAURA ESTELLE** MCGINN & GIBB, PLLC ART UNIT PAPER NUMBER 2568-A RIVA ROAD **SUITE 304** 1734 ANNAPOLIS, MD 21401

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/604,257	LONG ET AL.
	Examiner	Art Unit
	Laura Edwards	1734
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on <u>08 March 2005</u> .		
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-20</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10)⊠ The drawing(s) filed on <u>08 March 2005</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary (	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	atent Application (PTO-152)



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### **Drawings**

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

While Applicants provided replacement drawing sheets, the replacement drawings still do not include prior art legends on Figs. 1 and 2 and Applicants have made no comments otherwise.

## Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5, 7-12, and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Zimmer (US 3,987,724) for reasons set forth in the previous office action.

Applicants should note that Zimmer provide a screen printing nozzle having a first rubber layer (10 having inserts 11; see abstract, lines 10-12; col. 2, lines 21-26 and lines 35-39; and col. 3, lines 8, 9, and 17-23) on said nozzle body and a second rubber layer (12, see col. 2, lines 40-43 and col. 3, lines 9, 23, and 24).

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Claims 1-4, 7-11, and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitter (US 4,612,874) for reasons set forth in the previous office action.

Applicants should note that Mitter teaches a screen printing nozzle having a first rubber layer (6,7, see col. 9, lines 5-10 and col. 10, lines 40-44) on said nozzle body and a second rubber layer (8, 9, see col. 9, lines 12-16) on said first layer.

## Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 6, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer (US 3,987,724) in view of Mitter (US 4,612,874) for reasons set forth in the previous office action.

### Response to Arguments

Applicants' arguments filed 3/8/05 have been fully considered but they are not persuasive.

Applicants contend that Zimmer does not anticipate the claimed invention because Zimmer teaches a foam rubber layer against a Teflon layer while Applicants claim a first rubber layer and a second rubber layer and rubber is not equivalent to or a substitute for Teflon. This argument is not deemed persuasive because Applicants recite in the claims 7 and 14, as well as disclose in the instant specification [0016], that each rubber layer can optionally be a polymeric material or other engineered plastics. Teflon is considered a polymeric material or an engineered

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plastic material such that Zimmer would still anticipate the claimed invention because Zimmer explicitly discloses the first layer to be a foam rubber and the second layer to be a polymeric material or an engineered plastic material.

Applicants contend that the claimed invention is not obvious in view of Zimmer because the final Teflon layer used by Zimmer is thin and flexible which teaches away from the claimed invention in which the second rubber layer is hard and durable such that use of the Zimmer device with the flexible Teflon strip would NOT enable formation of thick high definition features, preservation of stencil mask integrity, as well as prevention of scooping of paste out of the stencil during screening. This argument is not deemed persuasive because the invention as broadly claimed only requires two layers having one layer of one rubber material of a hardness value an a second rubber or polymeric material layer of a greater hardness value than the first layer and Zimmer teaches such a combination of layers in a nozzle. In col. 3, lines 23-25, Zimmer even suggests that the nozzle or applicator in the vicinity of the screen being relatively stiff and nondeformable which suggests that Zimmer wants a hard surface in contact with stencil. As such the claimed invention remains anticipated by Zimmer. The Zimmer nozzle is equivalent in structure to the instantly claimed invention and therefore would function as the claimed invention to form thick high definition features, to preserve the stencil mask integrity, as well as prevent scooping of paste out of the stencil during screening.

Applicants contend that Mitter does not anticipate the claimed invention because Mitter teaches a foam rubber layer against a Teflon layer while Applicants claim a first rubber layer and a second rubber layer and rubber is not equivalent to or a substitute for Teflon. This argument is not deemed persuasive because Applicants recite in the claims 7 and 14, as well as disclose in the

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instant specification [0016], that each rubber layer can optionally be polymeric material or other engineered plastics. Teflon is considered a polymeric material or an engineered plastic material such that Mitter would still anticipate the claimed invention because Mitter explicitly discloses the first layer to be a foam rubber and the second layer to be a polymeric material or engineered plastic material.

Applicants contend that the claimed invention is not obvious in view of Mitter because the final Teflon layer used by Mitter includes thin flexible sliding strip(s) which teaches away from the claimed invention in which the second rubber layer is hard and durable such that use of the Mitter device with the flexible Teflon strip(s) would NOT enable formation of thick high definition features, preservation of stencil mask integrity, as well as prevention of scooping of paste out of the stencil during screening. This argument is not deemed persuasive because the invention as broadly claimed only requires two layers having one layer of one material rubber of a hardness value an a second rubber or polymeric material layer of a greater hardness value than the first layer and Mitter teaches said combination of layers in a nozzle. The Mitter nozzle is equivalent in structure to the instantly claimed invention and therefore would function as the claimed invention to form thick high definition features, to preserve the stencil mask integrity, as well as prevent scooping of paste out of the stencil during screening.

Applicants contend that the combination of Zimmer and Mitter is not deemed an obvious combination because neither Zimmer or Mitter teach or suggest the claimed invention of a nozzle including two rubber layers having different durometers, the outer layer being a hard durable rubber layer bonded to a first softer rubber layer. This argument is not deemed persuasive because both Zimmer and Mitter teach the nozzle as instantly claimed and the combination of

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bonding the two rubber layers would have been obvious to the routineer in the art so as to result in a single unitary nozzle applicator body.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura Edwards
Primary Examiner
Art Unit 1734

Le May 26, 2005